

RELCO

**Eliminates the
Frustration of
Stopping Trains**

Makes Your Train Go



As demonstrated on BBC TV's
TOMORROWS WORLD

INSTRUCTIONS ON REVERSE

RELCO

MODEL RAILWAY HF GENERATOR

USE 1-0 MF 50V SUPPRESSOR

The Relco generator is a new development made for model railways. It combats dirt, oil, carbon deposits and bad connections on the track thereby eliminating erratic engine movement and unscheduled stops.

Relco will operate: With any type of controller; On Z, N, OO & O gauge tracks; On AC & DC motors; On either direction of motor; On steel, brass or nickel silver tracks; Via sectional switching; Via blocking system; On large layouts.

However, effectiveness may be reduced on circuits with total track length of over 40 metres.

Relco is safe for children to use. Relco will not work with an H.F. lighting system. Relco will not cause pitting of rails or wheels and will not harm motors. Relco contributes to self-cleaning all the time it is in use. However, it is not effective on distorted or poor condition tracks.

IMPORTANT POINTS: Do not use controllers with an output of more than 16 volts unless using a separate auxiliary transformer as shown in Diagram B in which case the controller voltage can go up to 50 volts.

A Relco unit should be used for each controller on a circuit of track for each locomotive unless a blocking system is used, in which case more than one locomotive can be in use.

Except for switchgear, no other accessories should be connected to the output end of Relco.

Relco relies on the short circuit protection of the controller.

SUPPRESSION: To reduce the possibility of TV interference, the locomotive should be placed on track when Relco is used. For this same reason all leads from output terminals to switch gear and track should be as short as possible.

A suppressor, if used, must be placed as shown in Diagram B and not on track terminals. A suppressor must be used for electronic controllers.

HOW IT WORKS: Diagram A: D.C. power is taken from the controller. Diagram B: A.C. power is taken from an auxiliary independent 16. Volt A.C. source which is found in most controllers. The same A.C. source may be used for more than one Relco.

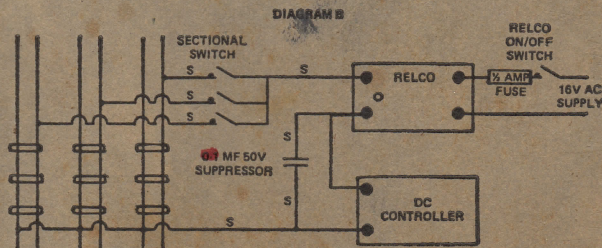
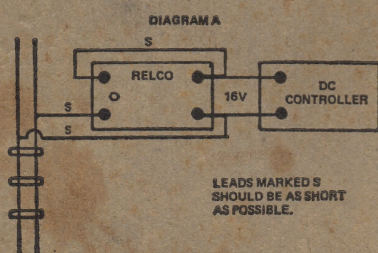
This power is converted to High Frequency in the generator at a low power level of 1/8 Watt.

This is then superimposed on the normal DC to track. When the locomotive is making good connection, the HF is automatically switched off, but when connection is poor the HF is instantly switched on, ionising the air gap. This will continue until the D.C. current is able to flow and re-establish contact with the locomotive.

HOW TO CONNECT: For simple circuits, connect controller to track via Relco unit as shown in Diagram A. The output terminals are labelled "To Track". If the controller has High/Low impedance switch, switch to low. For full effectiveness of Relco at slow speeds, particularly with electronic controllers, use an auxiliary 16V to 18V, 1/2 amp A.C. supply and connect as shown in Diagram B.

For Diagram B it is recommended that a 1/2 amp fuse is connected to protect 16V AC supply in case of short circuit.

HOW TO TEST: Turn controller knob to maximum; indicator lamp on top of Relco unit will glow. When the locomotive is mounted on the track, the indicator lamp should extinguish. The controller is now ready for use. When the engine is running at high speed the indicator will flash on and off intermittently. This is evidence of dirt on the track. On a clean track the indicator will not light up when the locomotive is running. To by-pass Relco, connect toggle switch across terminals marked "To Track". To switch off Relco, insert switch as shown in Diagram B.



Manufactured in England by: ROSEFAIR ELECTRONICS LTD.
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We reserve the right to alter specification and design without notice.

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